

Claims

1. A personal Interactive Voice Response (IVR) system comprising:

5 a plurality of IVR servers communicating personal IVR service node information in a network;

a plurality of personal IVR service node clients coupled to the plurality of IVR servers communicating the personal IVR service node information;

10 the plurality of personal IVR service node clients having a client – server relationship with the plurality of IVR servers; and

facilities for managing transmission of the personal IVR service node information using a Voice over Internet Protocol (VoIP) technology.

2. The personal IVR system of claim 1, further comprising:

15 a first computer readable program code to convert a voice input into a data input;

a data chunk containing an unprocessed volume of data generated by the first computer readable program code;

20 a plurality of voice coders to split the data chunk into a plurality of distinct data packets;

a second computer readable computer program code to decide an order of packet transmission; and

a processor to execute the first and the second computer readable program code.

25 3. A method of making a personal IVR service node comprising the steps of:

creating a new personal IVR service node;

managing the personal IVR service node; and

30 modifying the personal IVR service node.

4. The method of claim 3 wherein, the step of creating a new personal IVR service node further comprises:

creating a custom personal IVR service node;
setting an outgoing message in the personal IVR service node;
setting a password in the personal IVR service node;
setting a set of conditions in the personal IVR service node;
5 setting a set of actions in the personal IVR service node;
associating a condition with an action such that upon happening of a
predetermined condition, a predetermined action happens;
contacting an IVR server for the personal IVR service node information
transmission; and
10 transmitting the personal IVR service node information to the IVR
server using a VoIP technology.

5. The method of claim 3 wherein, the step of managing the
personal IVR service node further comprises:
15 connecting to an IVR server for the personal IVR service node
information transmission;
transmitting the personal IVR service node information to the IVR
server using a VoIP technology;
authenticating a person accessing the personal IVR service node;
20 recording messages in the personal IVR service node;
specifying addressees of the recorded message in the personal IVR
service node;
retrieving messages in the personal IVR service node;
routing messages in the personal IVR service node;
25 performing an action associated with a condition in the personal IVR
service node; and
conducting statistical analysis of the personal IVR service node usage.

6. The method of claim 5, wherein the step of recording messages
30 in the personal IVR service node further comprises the step of recording
messages using a Dual Tone Multiple frequency tone, a voice mail and an
email.

7. The method of claim 5, wherein the step of routing messages in the personal IVR service node further comprises the step of routing messages to a phone number, a voice mail, and an email address.

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8. The method of claim 5, wherein the step of retrieving the personal IVR service node messages further comprises:

retrieving the personal IVR service node messages via a combination of voice telephone input from a subscriber via a customer premise equipment;

10 retrieving the personal IVR service node messages via a touch-tone keypad selection from a subscriber via customer premise equipment; and

retrieving the personal IVR service node messages via a personal computer.

15 9. The method of claim 3 wherein the step of modifying the personal IVR service node further comprises:

connecting to an IVR server for the personal IVR service node information transmission;

20 transmitting the personal IVR service node information to the IVR server using a VoIP technology;

modifying outgoing messages the personal IVR service node;

modifying prompts in the personal IVR service node;

modifying actions associated with the prompt in the personal IVR service node; and

25 modifying a password in the personal IVR service node.

10. A method of designing an personal IVR service node comprising steps of:

30 (a) defining a plurality of logical symbols as the personal IVR service node prompts;

(b) defining at least one action associated with a logical symbol;

(c) storing the plurality of logical symbols, and at least one action associated with each of the plurality of logical symbols;

(d) receiving an input signal;

(e) decoding the received input signal;

5 (f) mapping the input signals into one of the plurality of logical symbols;

(g) executing a set of computer instructions performing the action associated with a mapped logical symbol;

10 (h) packetizing a recent transaction information in a plurality of digital packets using at least one voice coder;

(i) dispatching the recent transaction packet data to an Internet protocol address in a random order; and

(j) updating with an IVR server to record recent transaction.

15 11. The method of claim 10, wherein the step of receiving input signal comprises allowing a subscriber to regulate the personal IVR service node access according to preset privacy levels.

20 12. The method of claim 10, wherein the step of receiving input signal comprises authenticating a caller in the personal IVR service node.

13. A personal IVR service node comprising:
an IVR server to connect the personal IVR service node to a plurality of network elements;

25 an input device to accept the personal IVR service node input;
a set of input handling conditions;
a set of actions associated with the input handling conditions;
an interpret device to interpret the input;
a respond device to perform a plurality of actions associated with the
30 input handling condition;

a packaging device to convert information regarding the plurality of actions into a plurality of distinct data packets;

a dispatch device to transmit the plurality of distinct data packets to an Internet protocol address via a network using optimum network resources;
and

a security device to encrypt the data packets.

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14. The personal IVR service node of claim 13, wherein the dispatch device transmits the plurality of data packets in a non-sequential manner.

15. The personal IVR service node of claim 13, wherein the dispatch
10 device transmits the plurality of data packets via an Internet.

16. The personal IVR service node of claim 13, wherein the IVR server transmits the plurality of data packets in a non-sequential manner.

15 17. The personal IVR service node of claim 13, wherein the input device is a customer premise equipment.

18. The personal IVR service node of claim 13, wherein the input
20 device accepts a combination of voice telephone input from a subscriber or a caller via a customer premise equipment.

19. The personal IVR service node of claim 13, wherein the input
25 device accepts a touch-tone keypad selection from a subscriber or a caller via customer premise equipment

20. The personal IVR service node of claim 13, wherein the personal IVR service node accepts a data input from a subscriber or a caller via a personal computer.

30 21. The personal IVR service node of claim 13, wherein the personal IVR service node detects whether a subscriber or a caller accesses the personal IVR service node.

22. The personal IVR service node of claim 13, wherein the personal IVR service node validates a subscriber.

5 23. The personal IVR service node of claim 13, wherein the dispatch device converts data input to voice input.

24. The personal IVR service node of claim 13, wherein the dispatch device uses encryption algorithm for secured data transmission.

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